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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,087	04/19/2004	Kuang-Kai Liu	9607	1863

27752 7590 12/08/2006

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CINCINNATI, OH 45224

EXAMINER

BOGART, MICHAEL G

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/827,087

Applicant(s)

LIU, KUANG-KAI

Examiner

Michael G. Bogart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 25 September 2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections – 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cammarota *et al.* (US 6,307,119 B1)(hereinafter: “Cammarota”) in view of Muckenfuhs *et al.* (US 4,934,535; hereinafter “Muckenfuhs”).

Regarding claims 1 and 13, Cammarota teaches a disposable absorbent article (20) and method of making the same comprising:

- a) a liquid pervious topsheet (42);
- b) a liquid impervious backsheet (40) that is at least partially joined to the topsheet (42);
- c) an absorbent core (44) disposed at least partially between the topsheet (42) and the backsheet (40); and
- d) a wetness indicator (60, 66) at least partially disposed between the absorbent core (44) and the backsheet (40) and in liquid communication with the absorbent core (44)(e.g., printed on backsheet interior surface); the wetness indicator comprising a hidden central graphic (60, 81, 96, 97) and a background graphic (66, 85);

wherein the central graphic (60, 81, 96, 97) comprises a permanent color composition and the background graphic (66, 85) comprises at least one responsive color composition and that,

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upon wetting, exhibits a visible change that is selected from the group consisting of a color change, a graphic change, and combinations thereof (col. 16, line 28-col. 18, line 8)(see fig. 5, *infra*).

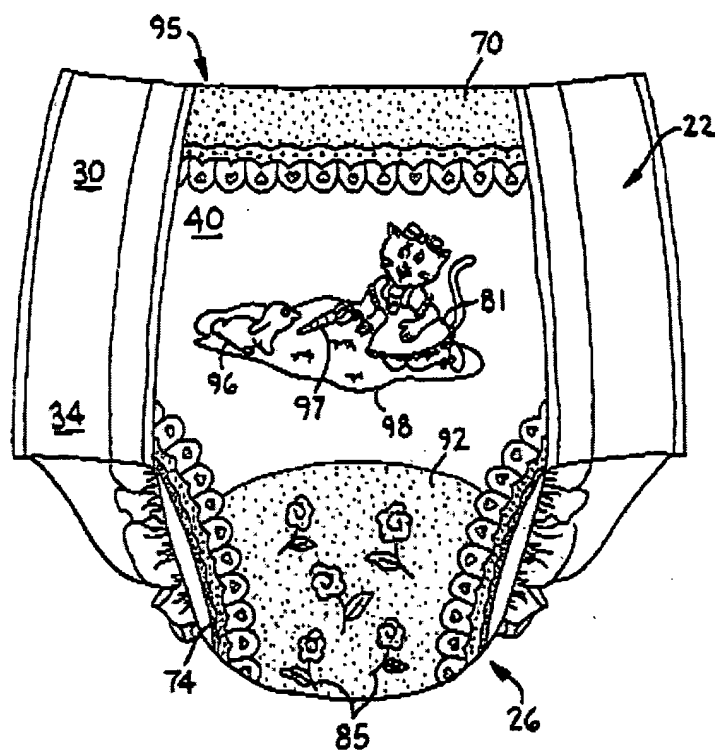


FIG. 5

Regarding the appearing when wetted aspects of the hidden graphic, this is a functional limitation. Apparatus claims must be structurally distinguishable from the prior art. MPEP § 2114.

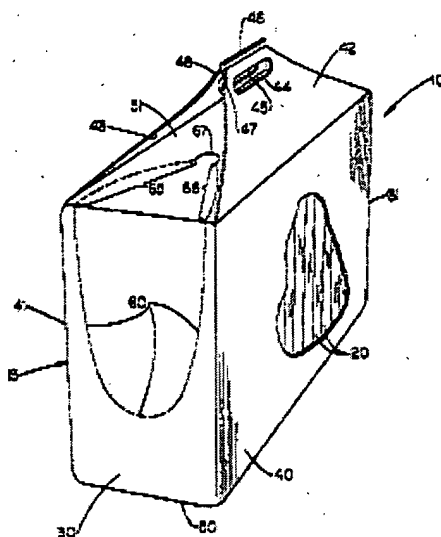
Cammarota does not teach that the central graphic is hidden.

Muckenfuhs teaches diapers (20) arranged in a package (15) such that they are hidden from view (see fig. 1, *infra*). This arrangement provides for convenient storage and transport of multiple diapers.

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At the time of the invention, it would have been obvious for one of ordinary skill in the art to store the diaper of Cammarota in the package of Muckenfuhs in order to provide a convenient means of storage and transport.

Regarding claim 8, Olson teaches plurality of active graphics (66, 109)(see fig. 7, *infra*).



**Fig. 1**

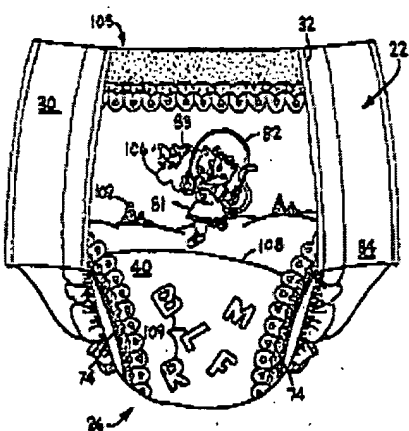


FIG. 7

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Claims 2-5 and 9-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cammarota and Muckenfuhs as applied to claims 1, 8 and 13, above, and further in view of Baker *et al.* (US 3,675,654; hereinafter "Baker"), Ball US 4,909,879) and Ito *et al.* (US 5,595,754 A; hereinafter "Ito").

Regarding claims 2-5, 9, 11 and 12, Olson does not teach the specific types/forms of pigments, dyestuffs solvents or a varnish coating.

These components are commonly issued in a wide variety of combinations in textile graphics production and in changeable graphics/indicators in absorbent articles. For example:

Baker teaches a varnish coating used to coat a moisture-actuated indicating agent (col. 1, lines 40-47) and solid pigment particles (col. 7, lines 31-44).

Ito teaches a non-aqueous solvent (claim 1).

Ball teaches the use of soluble dyestuff (abstract).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the component materials of the secondary references to make the graphics of Cammarota and Muckenfuhs in order to provide very well known components of graphics/indicator/dye formation.

Regarding the specific ranges of materials, generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

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A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). MPEP § 2144.05.

One of ordinary skill in the art would have recognized the benefits of increasing or decreasing the amount of pigment, dyestuff, or solvent and would have been motivated to find the optimal weight % of each component.

Regarding claim 10, Cammarota teaches a plurality of active graphics (66, 109)(see fig. 7, *supra*).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-5 and 8-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

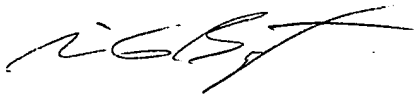
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Bogart  
5 December 2006

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

